

**REMARKS/ARGUMENTS**

Claims 1-20 are pending. Claims 1-20 are rejected. Claim 13 has been canceled. Claims 1, 2, 4, 5, 16, 18, and 19 have been amended to address enablement and indefinite rejections and to correct a typographical error of the structure in claims 1, 4, and 18. Applicants submit that no new matter has been added. As suggested by the Examiner during telephone interviews on February 6, 2004 and March 19, 2004, applicants also have removed overlapping subject matter in the claims to overcome a double patenting rejection with U.S. Patent No. 6,183,726, as submitted in the Amendments filed February 6, 2004, and March 19, 2004.

Applicants retain the Examiner's paragraph numbering for convenience.

**CLAIM REJECTIONS – OBVIOUS TYPE DOUBLE PATENTING**

3. Claims 1-11 and 18-20 are rejected under the judicially created doctrine of obviousness-type double patenting as unpatentable over claims 1-8 and 15 of U.S. Patent No. 6,733,744. The Examiner states that while the claims are not identical, they are not patentably distinct from each other because both sets of claims are directed to compounds, compositions, and uses thereof wherein compounds as set forth in independent claims 1, 4, and 8 (instant invention). In response, Applicants submit herewith a Terminal Disclaimer and, thus, respectfully request that the Examiner withdraw this rejection.

4. Claims 4-17 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as unpatentable over claims 4-17 of co-pending Application No. 09/757,332.

5. Claims 4-6, 8, 9, 11, and 13-17 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as unpatentable over claims 39, 40, 43, and 44 of co-pending Application No. 10/800,531.

6. Claims 4-6, 8, 9, 11, 13, and 14-17 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as unpatentable over claims 39, 40, 43, and 44 of co-pending Application No. 10/802,112.

Upon allowance of the 09/757,332; 10/800,531; and 10/802,112 applications, applicants will file a Terminal Disclaimer to overcome the obviousness-type double patenting rejection.

#### **CLAIM REJECTIONS UNDER 35 U.S.C. §112**

8. Claim 16 is rejected under 35 U.S.C. 112, first paragraph, as not enabled for preventing *In vivo* and *in vitro* fluorescence quenching. Applicants have amended this claim to replace the term "prevent" with "inhibit".

Applicants respectfully submit that the rejection is overcome and request it be withdrawn.

Claims 1-7 and 10-20 are rejected under 35 U.S.C §112, second paragraph, as being indefinite.

10. Claims 1, 2, 4, 5, 18, and 19 are rejected as ambiguous because the variable B<sub>3</sub> is not connected to the two single bonds in the ring containing A<sub>3</sub>, B<sub>3</sub>, C<sub>3</sub>, and D<sub>3</sub>, but attached to the outside of the two single bonds.

As requested by the Examiner, applicants have corrected the structure in claims 1, 4, and 18 to show that B<sub>3</sub> is a part of the referred to ring. Applicants respectfully assert that this was a typographical error in the Amendment filed on August 12, 2003 wherein there was no indication in the claim as to a change in structure of the chemical formula. The current correction reflects the chemical structure of the claims as originally filed.

Claims 4-7 and 10-17 are rejected as ambiguous because it is unclear what diagnostic or therapeutic procedure is being performed. Applicants respectfully disagree.

The specification amply discloses the range of diagnostic and therapeutic procedures possible (for example, at least on Page 16, line 8-13). Some examples are to monitor blood clearance profiles, to locate and treat a tumor, and to treat and locate an abnormality. This is fully supported in the original application as filed at least on Page 23, line 9 to line 17). Thus, applicants respectfully assert that the claims as written are not ambiguous; applicants are also not required to list each and every application of the method in the claims.

Applicants respectfully request that the rejection be withdrawn.

Claim 13 is rejected as confusing because it is unclear what localized therapy applicants are referring to since it depends upon claim 4, which is also directed to therapy.

Applicants have canceled claim 13 and request that the rejection be withdrawn.

Claims 2, 3, 5, 6, 19, and 20 are rejected as confusing because  $W_5$  and  $X_5 = C((CH_2)_aOH)_2$  and  $C((CH_2)_aCO_2H)_2$  have been deleted from there independent claims.

Applicants have amended claims 2, 3, 5, 6, 19, and 20 to delete  $C((CH_2)_aOH)_2$  and  $C((CH_2)_aCO_2H)_2$ . Thus, applicants respectfully request that the rejection be withdrawn.

Claims 2 and 5 are rejected because  $W_5$  and  $X_5 = C((CH_2)_aOH)CH_3$ ,  $C((CH_2)_aNH_2CH_3)$ ,  $C(CH_2)_a(NH_2)_2$  and  $[C(CH_2)_aNR_3R_4]_2$  are not encompassed in the definitions of  $W_5$  and  $X_5$  in their respective independent claims.

Applicants have amended claims 2, 5, and 19 to delete  $W_5$  and  $X_5 = C((CH_2)_aOH)CH_3$ . Applicants, however, respectfully assert that wherein  $W_5$  and  $X_5 = C((CH_2)_aNH_2CH_3)$ ,  $C(CH_2)_a(NH_2)_2$  and  $(C(CH_2)_aNR_3R_4)_2$  are recited in claims 1, 4, and 18 wherein  $R^1$  to  $R^4$  are aminoalkyls as known to one skilled in the art. Thus, applicants respectfully request that the rejection be withdrawn.

### **CONCLUSION**

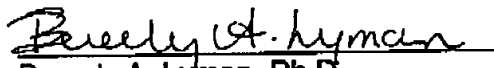
For the foregoing reasons, applicants submit that all of the claims are patentable, and a Notice of Allowance is respectfully requested. Applicants know of no

fee due with this submission. However, if any fees are necessary, the Commissioner may consider this to be a request for such and charge any necessary fees to Deposit Account No. 23-3000.

The Examiner is invited to contact applicants' undersigned representative with any questions.

Respectfully submitted,

WOOD, HERRON & EVANS. L.L.P.

  
Beverly A. Lyman, Ph.D.  
Reg. No. 41,961

2700 Carew Tower  
441 Vine Street  
Cincinnati, OH 45202  
513-241-2324  
513-421-7269 (facsimile)